

THE CARTOON INTRODUCTION TO ECONOMICS



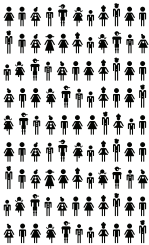
VOLUME ONE: MICROECONOMICS



BY GRADY KLEIN AND
YORAM BAUMAN, Ph.D.

THE WORLD'S FIRST AND ONLY STAND-UP ECONOMIST

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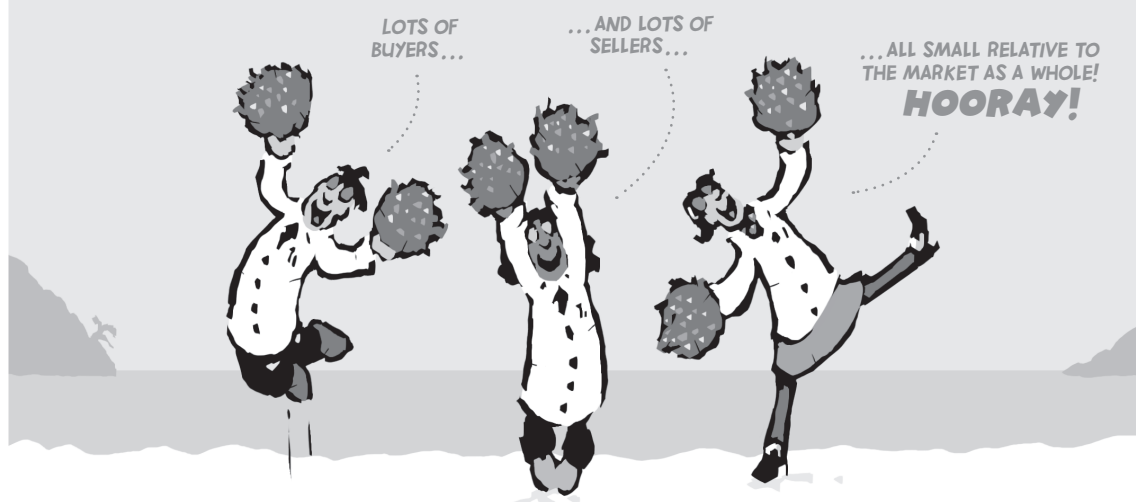
CHAPTER 15

THE BIG PICTURE

ECONOMISTS SEE THE WORLD
DIFFERENTLY.



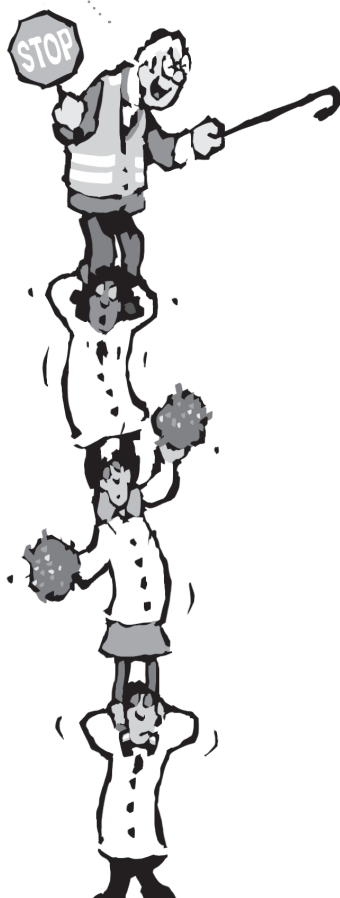
THE ECONOMIC WORLDVIEW IS STRONGLY INFLUENCED BY ONE SIMPLE IDEA:
COMPETITIVE MARKETS ARE GREAT!



THE BENEFITS OF COMPETITIVE MARKETS CAN BE SEEN FROM THE **COASE THEOREM**.

IF THERE'S NOTHING
TO STOP PEOPLE FROM
TRADING...

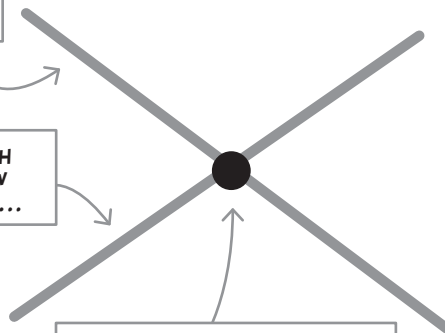
... THEN NOTHING WILL
STOP PEOPLE FROM
TRADING!



SO BUYERS WITH
HIGH MARGINAL
BENEFITS...

... WILL TRADE WITH
SELLERS WITH LOW
MARGINAL COSTS...

... AND THE RESULT WILL
BE PARETO EFFICIENT!



MORE FORMALLY, ECONOMISTS OFTEN RESPOND TO THE **BIG QUESTION** BY TALKING ABOUT A RESULT CALLED **THE INVISIBLE HAND THEOREM**.

UNDER **WHAT CIRCUMSTANCES** DOES INDIVIDUAL OPTIMIZATION LEAD TO OUTCOMES THAT ARE GOOD FOR THE GROUP AS A WHOLE?

IN A PERFECT WORLD, **COMPETITIVE MARKETS** WILL LEAD TO A PARETO EFFICIENT OUTCOME!



OF COURSE, THE WORLD WE LIVE IN IS **NOT PERFECT**...

... BUT ECONOMISTS STILL THINK ABOUT COMPETITIVE MARKETS THE SAME WAY THAT REGULAR PEOPLE THINK ABOUT **PUPPIES**.

IT'S SO **ADORABLE!**

BUT HOW DO WE TAKE CARE OF IT?

HERE ARE A FEW GOOD **RULES**:

RULE #1: UNDERSTAND THE MARKET'S LIMITATIONS

RULE #2: PROTECT COMPETITION

RULE #3: GIVE THE MARKET SECOND CHANCES



RULE #1: UNDERSTAND THE MARKET'S LIMITATIONS.



JUST LIKE YOU CAN HAVE A **PARETO EFFICIENT** OUTCOME WHERE ONE KID GETS ALL THE CAKE...



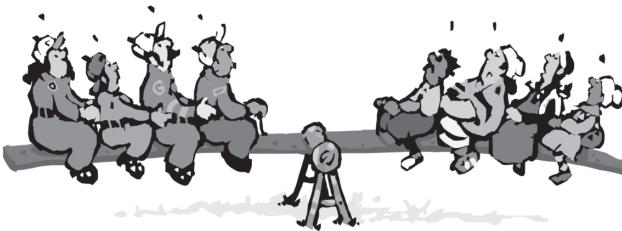
... YOU CAN HAVE COMPETITIVE MARKETS THAT LEAD TO OUTCOMES THAT **ARE PARETO EFFICIENT** BUT ARE **NOT** WHAT MOST PEOPLE WOULD CONSIDER TO BE **GOOD**.



BUT HERE TOO ECONOMISTS SEE THE WORLD **DIFFERENTLY**.

WHEN ADDRESSING INEQUALITY, ECONOMISTS
TEND TO FAVOR POLICIES THAT **MINIMIZE
INTERVENTION** IN WELL-FUNCTIONING
COMPETITIVE MARKETS...

SOMETHING TELLS ME
YOU SHOULD BE **REALLY
CAREFUL** ABOUT WHERE
YOU DROP THAT,



...AND **MAXIMIZE
INDIVIDUAL CHOICE.**

INSTEAD OF DIRECTLY GIVING
POOR PEOPLE GOODS AND
SERVICES WE SHOULD JUST
GIVE THEM **MONEY**.

THAT LEAVES AS MANY
CHOICES AS POSSIBLE UP
TO EACH INDIVIDUAL...

...AND WHO'S BETTER
AT OPTIMIZING THAN
THE INDIVIDUAL?

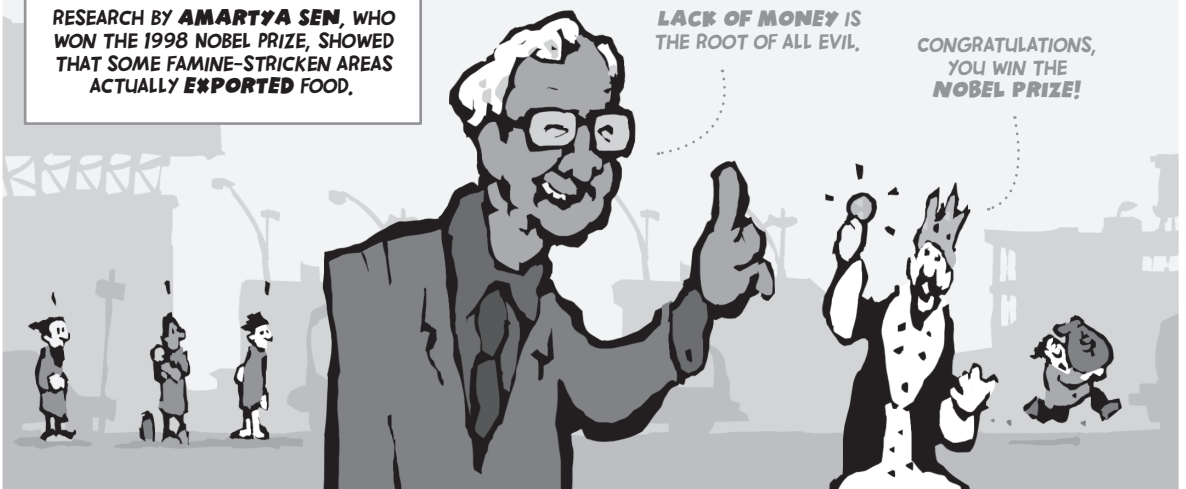


GIVING STARVING PEOPLE **MONEY** INSTEAD OF **FOOD** MAY SOUND ODD, BUT HISTORY
SHOWS THAT MANY FAMINES WEREN'T CAUSED BY LACK OF FOOD BUT BY LACK OF MONEY.

RESEARCH BY **AMARTYA SEN**, WHO
WON THE 1998 NOBEL PRIZE, SHOWED
THAT SOME FAMINE-STRICKEN AREAS
ACTUALLY **E*PORTED** FOOD.

LACK OF MONEY IS
THE ROOT OF ALL EVIL.

CONGRATULATIONS,
YOU WIN THE
NOBEL PRIZE!

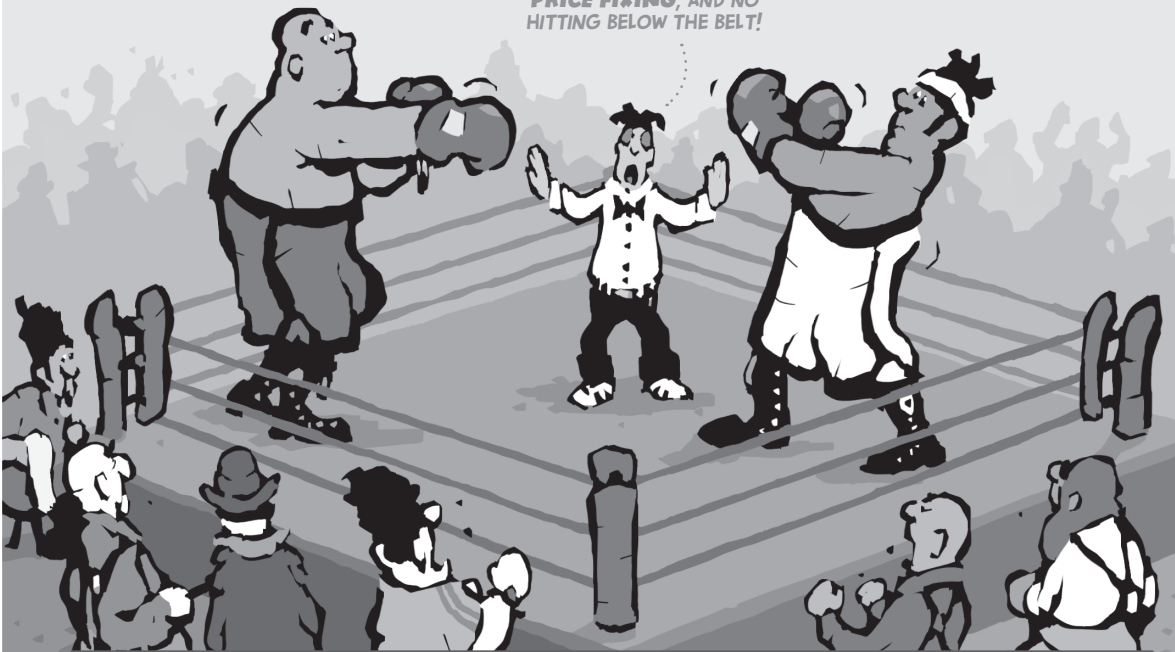


RULE #2: PROTECT COMPETITION.



MARKETS NEED **REFEREES**...

OKAY, NO **COLLUDING**, NO **PRICE FIXING**, AND NO **HITTING BELOW THE BELT!**



... BECAUSE COMPANIES HAVE AN INCENTIVE TO FIX PRICES OR FORM CARTELS OR OTHERWISE ENGAGE IN **ANTI-COMPETITIVE BEHAVIOR**.

PSST...

IF WE **BOTH**
CHARGE HIGH
PRICES...

... THEN WE'LL
BOTH MAKE
MORE MONEY!

WE LEARNED THAT
ON PAGE 102!



IN THE 19TH CENTURY, CARTELS WERE KNOWN AS **TRUSTS**, WHICH IS WHY POLICIES TO PROTECT COMPETITION ARE CALLED **ANTITRUST** POLICIES.



AND IN CASES WHERE COMPETITION IS LIMITED OR IMPOSSIBLE, GOVERNMENTS CAN WORK TO **LIMIT** THE EXTENT OF DAMAGE TO CONSUMERS.

NO, YOU CAN'T CHARGE \$900 A MONTH FOR ELECTRICITY!

YOU'RE A **REGULATED MONOPOLY**!



RULE #3: GIVE THE MARKET SECOND CHANCES.



SOMETIMES COMPETITIVE MARKETS CREATE BIG MESSSES, LIKE POLLUTION.



ECONOMISTS THINK OF POLLUTION AS AN *EXTERNAL COST*, MEANING A COST IMPOSED ON A THIRD PARTY.



THESE EXTERNAL COSTS ARE AT THE HEART OF THE **TRAGEDY OF THE COMMONS**.

OPTIMIZING BEHAVIOR
BY INDIVIDUALS...

-COUGH-
-COUGH-

... CAN PRODUCE AN
OUTCOME...

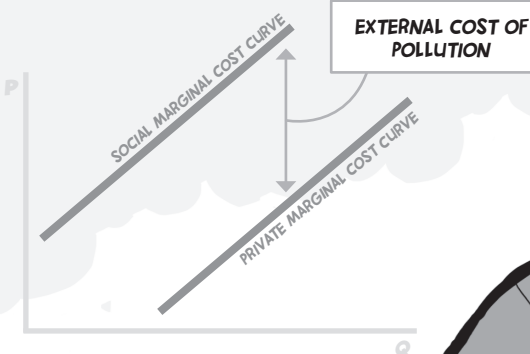
-COUGH-
-COUGH-

... THAT IS BAD FOR
EVERYONE,

-COUGH-
-COUGH-



FROM THE PERSPECTIVE OF SUPPLY AND DEMAND, THE PROBLEM IS THAT EXTERNAL COSTS
CREATE A **GAP** BETWEEN **PRIVATE** MARGINAL COSTS AND **SOCIAL** MARGINAL COSTS.



IF I DON'T HAVE TO BEAR THE
FULL COST OF MY ACTIONS,
OF COURSE I'M GOING TO
POLLUTE A LOT!



WHEN YOU LOOK AT THE PROBLEM THIS WAY, IT'S EASY TO SEE THAT THE SOLUTION PROPOSED
BY ECONOMISTS IS TO USE **MARKET FORCES** TO CORRECT **MARKET FAILURE**.



THE WAY TO
GET PEOPLE TO
POLLUTE LESS...

... IS TO MAKE
POLLUTING
EXPENSIVE!

WOW, NOW **THAT'S**
AN IDEA WORTHY OF A
NOBEL PRIZE!

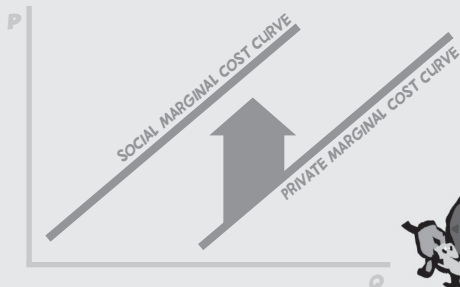


ONE WAY TO MAKE POLLUTING EXPENSIVE IS TO IMPOSE A **CARBON TAX** OR OTHER TYPE OF **POLLUTION TAX**.

ANYONE WHO WANTS TO
SELL FOSSIL FUELS HAS
TO PAY A CARBON TAX!



A PROPERLY DESIGNED POLLUTION TAX CAN **CLOSE THE GAP** BETWEEN
PRIVATE MARGINAL COSTS AND **SOCIAL MARGINAL COSTS**.



BY INCREASING **PRIVATE**
MARGINAL COSTS...

... THE POLLUTION TAX
INTERNALIZES THE
EXTERNAL COSTS!



IT SOUNDS LIKE **MAGIC**, BUT DON'T FORGET WHAT WE LEARNED ABOUT TAXES:

MARKET FORCES WILL PUSH
SOME IF NOT ALL OF THE TAX
BURDEN FROM SELLERS
ONTO **BUYERS**...

... WHICH MEANS WE'LL
ALL HAVE TO PAY
HIGHER PRICES FOR
THINGS LIKE GASOLINE!

WE CAN GET
CLEAN AIR...

... BUT WE CAN'T
GET A **FREE**
LUNCH!

JUST A HALF A
TANK, PLEASE.



AN ALTERNATIVE TO A POLLUTION TAX IS
A SYSTEM THAT INVOLVES A **CAP...**

WE'RE GOING TO
ISSUE **PERMITS** FOR A
**LIMITED AMOUNT OF
POLLUTION...**

...AND YOU CAN'T
POLLUTE WITHOUT
A **PERMIT!**

...AND **TRADE.**

COMPANIES CAN
BUY OR SELL
PERMITS.

THIS GIVES
THEM MAXIMUM
FLEXIBILITY...

...SO THEY CAN
MAKE PARETO
IMPROVEMENTS BY
TRADING!

**CAP-AND-TRADE SOUNDS VERY DIFFERENT FROM A POLLUTION TAX,
BUT IN FACT THEY'RE PRACTICALLY IDENTICAL.**

THEY BOTH WORK BY
**MAKING POLLUTION
EXPENSIVE!**

NEITHER ONE IS
MAGIC, BUT BOTH OF
THEM DO COME WITH A
SPECIAL BONUS...

THE SPECIAL BONUS OF
POLLUTION TAXES IS
THAT THEY **GENERATE
REVENUE...**



CAP-AND-TRADE CAN
ALSO GENERATE
REVENUE...

... IF YOU USE AN
AUCTION TO
SELL THE PERMITS!



... AND WE CAN USE THIS REVENUE TO
LOWER EXISTING TAXES.

LOWER TAXES ON
WORKING!



LOWER TAXES ON
SAVING!



LOWER TAXES ON
INVESTING!



WHY TAX **GOODS**
WHEN WE CAN
TAX **BADS?**



THE WAY ECONOMISTS SEE THE WORLD,
TAXES AND POLLUTION ARE TWO UNFORTUNATE REALITIES
THAT GO GREAT TOGETHER!

IN THIS CASE, TWO
WRONGS REALLY
DO MAKE A RIGHT!



ISN'T THE WORLD
HEAVENLY?



"LEARNING ECONOMICS SHOULD BE FUN. KLEIN AND BAUMAN MAKE SURE THAT IT IS."

—**N. GREGORY MANKIW**, PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY, AND AUTHOR OF *PRINCIPLES OF ECONOMICS*

GOOGLE'S CHIEF ECONOMIST, HAL VARIAN, ONCE WROTE, "YOU DON'T NEED A BRAND-NEW ECONOMICS. YOU JUST NEED TO SEE THE **REALLY COOL STUFF**, THE MATERIAL THEY DIDN'T GET TO WHEN YOU STUDIED ECONOMICS." *THE CARTOON INTRODUCTION TO ECONOMICS* IS ALL ABOUT INTEGRATING THE REALLY COOL STUFF—SUCH AS AUCTION THEORY, ADVERSE SELECTION, AND THE PRISONERS' DILEMMA—INTO THE **FUNNIEST** AND **MOST DIGESTIBLE** OVERVIEW OF MICROECONOMICS YOU'LL EVER READ.



"HILARITY AND ECONOMICS ARE NOT OFTEN FOUND TOGETHER, BUT THIS BOOK HAS A LOT OF BOTH. IT ALSO DOES A GREAT JOB OF EXPLAINING IMPORTANT ECONOMIC CONCEPTS SIMPLY, ACCURATELY, AND ENTERTAININGLY—QUITE A FEAT." —**ERIC MASKIN**, NOBEL LAUREATE IN ECONOMICS

"BAUMAN AND KLEIN PRESENT SOLID BASIC ECONOMICS IN A BRILLIANT CARTOON WRAPPER. THE AUTHORS SUCCESSFULLY SHINE A HAPPY LIGHT ON THE DISMAL SCIENCE."

—**HUGO SONNENSCHNEIN**, DISTINGUISHED SERVICE PROFESSOR AND PRESIDENT EMERITUS, UNIVERSITY OF CHICAGO

"THIS IS A SERIOUSLY FUNNY BOOK! KLEIN AND BAUMAN OFFER AN ENLIGHTENING AND ENTERTAINING LOOK AT WHY OUR DAY-TO-DAY CHOICES MATTER AND HOW THEY ALL COMBINE. STUDENTS WILL FIND THIS A GREAT ADDITION TO THEIR TEXTBOOKS, AND CRITICS OF THE DISCIPLINE WILL LEARN WHAT ECONOMICS IS REALLY ABOUT." —**DIANE COYLE**, AUTHOR OF *THE SOULFUL SCIENCE*

"HAD ART SPIEGELMAN AND JOHN MAYNARD KEYNES COLLABORATED ON A COMIC BOOK ON ECONOMICS, THEY COULD ONLY HAVE DREAMED OF COMING UP WITH SOMETHING THIS GOOD." —**JONATHAN A. SHAYNE, A.K.A. MERLE HAZARD**,

COUNTRY SINGER AND FOUNDER OF SHAYNE & CO., LLC



A FREELANCE CARTOONIST, ILLUSTRATOR, AND ANIMATOR, **GRADY KLEIN** IS THE CREATOR OF THE *LOST COLONY* SERIES OF GRAPHIC NOVELS.



AN ENVIRONMENTAL ECONOMIST AT THE UNIVERSITY OF WASHINGTON (AND A PART-TIME TEACHER AT SEATTLE'S LAKESIDE HIGH SCHOOL), **YORAM BAUMAN** ALSO PERFORMS AROUND THE WORLD AS THE WORLD'S FIRST AND ONLY STAND-UP ECONOMIST.



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